

INDY

ham radio

NEWSLETTER

W9JP

INDIANAPOLIS RADIO CLUB, INC.

Regular meetings held on the 2nd & 4th
Fridays at 8:00 PM in the United
Christian Mission Bldg. 222 S. Downey

Trustee Ron Williams W9JVF
1147 N. Emerson 46219

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APRIL 9, 1973

INDIANAPOLIS RADIO CLUB INC.

ISSUE NO. 7

PROGRAM MEETING:

FRIDAY APRIL 13th

Robert Annis ex9CUD of the R. B. Annis Co. will present our program on "MAGNETIC - ELECTRONIC DEVICES AND APPLICATIONS. Bob is well known in his field of magnetics and will demonstrate equipment and show us how to employ magnetic materials in our circuits.

Code Class

Remember that Prof's Schultz and Lueth W9BR, & W9AI are giving code class sessions at 7:30 PM on each meeting night. Come early and learn from these expert CW operators so you can pass that general ticket come May when the RI (radio inspector) comes to town.

7:30 PM
before meeting

QSL & PHOTO

WE WANT YOUR QSL & PICTURE. Please see that you bring to club, or see that we get your QSL & photo of you so they can be put on a display board for the Indianapolis Hamfest and other events etc. Prof Schultz is in charge of this and if you have any questions please feel free to ask.....

HAMFESTS:

DAYTON HAMVENTION...April 28. Saturday at the Dayton. OHIO Hara Arena and Exhibition Center. Dinner Friday with K7UGA Barry Goldwater QCWA president presiding.

TARS Hamfest Sunday May 6, Evansville, Ind. at 4-H grounds. overnight camping, bingo, flea market etc. Contact Robby, W9MKZ 502 So. Lincoln Park Dr. Evansville Ind. 47714.

Wabash Hamfest, May 20th, Wabash Co. Fairgrounds usual location.

INDIANAPOLIS HAMFEST August 12th at the Citizens gas Recreation area same as last year....local clubs are cooperating as before Bill Evans Wb9BEN and others are already hard at work for this years get together.

MARION CO. DIRECTORY

Alvey Pittman W9EL reports that progress is being made on the Club directory of Marion County hams and plans to have it underway soon... Advertising will soon close for this publication, contact Charlie Byers WB9GCD, Alvey Pittman or Jim Sugioka.

PROGRAM REVIEW:

on reverse side of page.

73 Bob W9PSE

Founded 1914our 59th year!

PROGRAM REVIEW FOR March 23, 1973

45 Members and guest attended to hear Dick Judkins, Chief Engineer of Esterline-Angus Company speak on Measurement Techniques and Instrumentation. AC Rectifier type AC Voltmeters are accurate only when measuring pure sign wave currents. When measuring other waveforms, such as the chopped-up AC output from a Silicon Controlled Rectifier type control, the error is high. Other instruments can do this measurement, but are usually not available to the ham.

Dick showed how we can take cheap good surplus meter movements and make voltmeters, and milliameters of various extended ranges. He showed the ohms law math required to provide the correct values of the Multiplier, and showed that once the ohms-per-volt value of an instrument is known, the multiplier is simply the product of this factor, and the difference between the now value and the wanted value.

Shunts for milliameters are usually wound directly over a higher value resistor simply using it as a coil form. In desperation, if nothing is known about a surplus meter except that it works on DC, a shunt can still be made by placing the meter in series with a known meter of correct range, then place a short length of resistance wire across the surplus meter and pull in more and more wire across the terminals until the correct range is obtained.

Dick also demonstrated a millivoltmeter simply built using two octal sockets which easily mount directly on the large meter studs. The IC unit is an operational amplifier and provides the added amplification needed for the sensitivity.

He also demonstrated a home-brew AC voltmeter, which reads only from 100 volts to 140; thus greatly expanding the useful range. The meter is really a fake. It is a DC voltmeter or milliammeter which operates in a bridge circuit, one leg of which consists of a ZENER diode which provides the restricted control. The input AC is rectified, filtered and fed to the bridge. A more sophisticated digital meter was demonstrated which was an animal rectal thermometer providing the temp. digitally around 90 to 100 degrees F.

Dick, your presentation was indeed magnificent. You were an inspiration to us all.

No Noodle Nudgers this time, the blackboard was missing.

Prepared by: Art Schultz, W9BR, Program Elicitor

